

REMARKS

Claims 1-29 are pending in the present application. By this reply, claims 24-29 have been added. Claims 1 and 14 are independent claims.

INTERVIEW REQUEST

When the Examiner is ready to act on this case and before another (if any) Office Action is issued, the Examiner is respectfully requested to contact Applicant's representative, Esther Chong (Reg. 40,963), at 703-205-8000 to schedule a personal interview. This is an official request for the interview and should not be ignored.

DRAWING OBJECTION

In response to the Examiner's previous objection to the drawing corrections filed on February 4, 2002, Applicant filed arguments traversing this drawing objection in the Amendment After Final Rejection filed on July 8, 2002 which has been entered in the RCE. The Examiner, however, has not indicated whether such arguments have overcome the Examiner's objection to the drawing corrections filed on February 4, 2002. The Examiner's indication that the drawing objection has been withdrawn and that the Drawing Change Authorization Request filed on February 4, 2002 has been approved is respectfully requested.

OBJECTION TO NEW MATTER ADDED TO SPECIFICATION

The last Amendment filed on July 8, 2002¹ has been objected to under 35 U.S.C § 132 because it allegedly introduces new matter to the disclosure. This objection is respectfully traversed.

Applicant respectfully disagrees with the Examiner's assertion that the resetting of the location information of the supplementary spare area (in the DMA) to a certain value is not supported by the original disclosure. On page 12, lines 10-12, the original specification clearly states that "the location information of the supplementary spare area recorded in the DMA is reset (step 603)". The original specification then discusses more detailed examples of the resetting step. As one example of this resetting step, the original specification continues to describe that "all of the location information values of the supplementary spare area may be converted to the lowest value . . . or the highest value" (page 12, lines 14-17 of the specification). As another example of the resetting step, the original specification discloses that "the location information may be converted into a specific code value according to a predetermined agreement" (page 12, lines 17-19 of the specification). These examples of the resetting step provide a clear and full

¹ Although the Examiner has indicated on page 2 of the Office Action dated September 3, 2002 that the Amendment filed on February 4, 2002 is objected to under 35 U.S.C § 132, it is believed that this is a typographical error and Applicant treats this as an objection to the Amendment filed on July 8, 2002.

support for the resetting of the location information of the supplemental spare area to a certain value (e.g., highest value, lowest value, a predetermined code value, etc.). Original claims 3-6 also provide support for the previously added materials.

However, only to expedite prosecution, the paragraph beginning on page 12, line 8 in the specification has been amended to remove certain allegedly objectionable phrases. The present amendments to the specification have been made without acquiescing to the Examiner's allegation of the new matter and are fully supported by the original disclosure.

Accordingly, reconsideration and withdrawal of this objection is respectfully requested. Entry of the present Amendment is also respectfully requested.

35 USC § 112, FIRST PARAGRAPH, REJECTION

Claims 1-23 have been rejected under 35 USC § 112, first paragraph, as because the Examiner alleges that the resetting to a "predetermined reset value" and thereby erasing any previously stored address information are not supported by the original disclosure.

Please see Applicant's remarks above concerning the Examiner's alledged new matter. Without acquiescing to any of the Examiner's allegations made

regarding this rejection, only to expedite prosecution, the claims have been amended to remove the objectionable phrases pointed out by the Examiner.

Therefore, claims 1-23 are in full compliance with 35 U.S.C § 112, first paragraph, and reconsideration and withdrawal of the rejection based on these reasons is respectfully requested.

35 U.S.C. § 102 REJECTION

Claims 1-4 and 7-19 have been rejected under 35 U.S.C § 102(b) as being anticipated by *Bish et al.* (U.S. Patent No. 5,235,585). This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

Regarding independent claims 1 and 14, the Examiner alleges that *Bish et al.* anticipates the "resetting" feature of claims 1 and 14 because *Bish et al.*'s surface analysis performed while formatting the optical disc 11 involves the resetting of the stored location information of the supplementary spare area to a zero/null value.

On column 6, lines 1-5, *Bish et al.* discloses that the surface analysis occurs so that defective sectors can be identified and listed in a PDL 15. *Bish et al.* discloses that the surface analysis includes erasing the optical disc, writing data thereto, and reading the data back under stress conditions to look for any defective sector. In other words, the surface analysis erases the data area (user

area/spare area) of the optical disc, writes data thereto and reads the data therefrom to test whether the sectors in the data area are capable of recording and reproducing data (i.e., to detect whether the sectors in the data area are defective). *Bish et al.*'s surface analysis then deals with erasing the user/spare area, but has nothing to do with erasing (resetting/converting) the stored location information of the supplementary spare area.

Further, Applicant's claimed location information of the supplementary spare area indicates the location as well as the size of the supplementary spare area on the optical recording medium and is recorded in a DMA which is different from the data area (user/spare areas) as shown in Figure 1 of the present application.

Accordingly, independent claims 1 and 14 and their dependent claims (due to their dependency) are not anticipated by *Bish et al.* and thus are patentable over *Bish et al.*

In the alternative, regarding claim 4 (and claim 21), the Examiner alleges that *Bish et al.* discloses the predetermined value being a lowest value and cites column 6, lines 25-30 of *Bish et al.* However, this portion of *Bish et al.* is directed to reordering the list of replacement sectors in an ascending order according to track and sector numbers for the SDL 16 as shown in Figure 4. *Bish et al.*, including this cited portion, does not teach anywhere that the location information

of the supplementary area is converted to a lowest value to reset the stored location information in response to a formatting request/instruction. Thus, *Bish et al.* does not anticipate each and every feature of claim 4.

Regarding independent claim 17, on page 10 of the Office Action dated September 3, 2002, the Examiner states at paragraph (E) that *Bish et al.* teaches registering sectors registered in an old SDL into a new PDL. However, the portion cited by the Examiner merely teaches an assignment of a replacement sector for a defective sector, and does not teach the transfer of registration information of sectors from the old SDL into the new PDL, as required by claim 17. Thus, *Bish et al.* does not anticipate each and every feature of claim 17.

35 U.S.C § 103 REJECTION

Claims 5-6 and 22-23 have been rejected under 35 U.S.C § 103(a) as being unpatentable over *Bish et al.* as applied to claims 1-4 and 7-19 above. This rejection, insofar as it pertains to the presently pending claims, is respectfully traversed.

As discussed above, *Bish et al.* does not teach or suggest, *inter alia*:

resetting the stored location information of the supplementary spare area in response to a formatting request, the location information of the supplementary spare area indicating a location of the supplementary spare area on the optical recording medium and a size of the supplementary spare area

as recited in independent claim 1 from which claims 5 and 6 depend; and

resetting the location information of the supplementary spare area in response to the instruction, the location information of the supplementary spare area indicating a location of the supplementary spare area on the recording medium and a size of the supplementary spare area

as recited in independent claim 14 from which claims 22 and 23 depend.

Further, there is no motivation to modify *Bish et al.* to render these claimed features obvious since *Bish et al.* is not concerned with resetting the location information of the supplementary spare area in response to a formatting request/instruction.

In the alternative, regarding claims 5-6 and 22-23, the Examiner states that the limitations in claims 5-6 and 22-23 do not define a patentable distinction over *Bish et al.* since "both the invention as whole and *Bish* are directed to assigning the sectors in order they are available and choos[ing] sectors which are near to the original sector thus keeping track movement to minimum for saving time" (pages 7 and 8 of the Office Action). This statement is inaccurate. Applicant's claimed invention is not directed to assigning sectors to minimize track movement. Rather, Applicant's claimed invention is directed to a method of formatting an optical recording medium wherein the stored location information of a supplementary spare area is reset in response to a formatting request. This is advantageous because it provides compatibility between a file system and a driver accessing the recording

medium upon formatting of the recording medium, and/or compatibility between different drivers when the different drivers are used to access the recording medium upon formatting of the recording medium. The Examiner's remarks on page 11 of the Office Action that such features are not given weight because they are not claimed. To give weight, then such advantageous features of Applicant's invention are presented in dependent claims 25-26 and 28-29.

Accordingly, independent claims 1 and 14 and their dependent claims 5-6 and 22-23 (due to their dependency) are patentable over *Bish et al.*, and reconsideration and withdrawal of the rejection based on these reasons is respectfully requested.

EXAMINER'S REMARKS TO APPLICANT'S ARGUMENTS

On page 10 of the Office Action dated September 3, 2002, the Examiner addresses Applicant's previous remarks and states at paragraph (D) that "careful examination of step 603 in Figure 6 shows, that it only discloses: 'resetting location information of supplementary spare area recorded in DMA'. The step 603 does NOT say anything about reset to a predetermined reset value at all." Applicant respectfully disagrees. As discussed above, the original specification on page 12, lines 10-23 clearly discloses that the location information of the supplementary spare area in step 603 may be reset to a certain value such as the lowest value, the highest, a specific code value. Also generally the term "resetting"

indicates inherently that the location information is converted to or assigned to some value. It is erroneous to state that the original disclosure discloses nothing about resetting to a predetermined reset value.

NEW CLAIMS

Regarding new claims 24-29, these claims are allowable for at least the same reasons that their independent claims 1 and 14 are allowable as discussed above.

In the alternative, regarding claims 24 and 27, these claims are allowable because in *Bish et al.*, spare areas are dispersedly allocated among groups, whereas in Applicant's invention, the supplementary spare area is close to a lead-out area of the recording medium.

In the alternative, regarding claims 25-26 and 28-29, these claims are allowable because they recite features neither taught nor suggested by the prior art of record.

The Examiner's indication of allowance of claims 24-29 is respectfully requested.

CONCLUSION

For the foregoing reasons and in view of the above clarifying amendments, Applicant respectfully requests the Examiner to reconsider and withdraw all of the objections and rejections of record, and earnestly solicits an early issuance of a Notice of Allowance.

Should there be any outstanding matters which need to be resolved in the present application, the Examiner is respectfully requested to contact Esther H. Chong (Registration No. 40,953) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Attached hereto is a version showing changes made by this Amendment.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant respectfully petitions for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$930.00 is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version with Markings to Show Changes Made



VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

The specification has been amended as follows:

The paragraph beginning on page 12, line 8 has been amended as follows:

--Referring to Fig. 6, upon receiving a formatting command (step 601), a judgement is made if a supplementary spare area has been assigned (step 602). If the supplementary spare area assignment exists, the location information of the supplementary spare area recorded in the DMA is reset (step 603) [to a predetermined reset value]. To reset the location information of the supplementary spare area, any one of a variety of methods may be utilized. In one example, all the location information values of the supplementary spare area may be converted to [a predetermined reset value which may be] the lowest value (for example, 00h) or the highest value (for example, FFh)[, thereby erasing any previously stored address information]. In another example, the location information may be converted into a specific code value according to a predetermined agreement. That is, the location information value may be converted to a predetermined [reset] value which would allow the file system to recognize that the location information of the supplementary spare area has been reset when the file system receives the DMA information from the driver.--

In the Claims

The claims have been amended as follows:

1. (Three Times Amended) A method of formatting an optical recording medium stored therein with location information of a supplementary spare area, the method comprising:

(a) resetting the stored location information of the supplementary spare area [to a predetermined reset value] in response to a formatting request, the location information of the supplementary spare area indicating a location of the supplementary spare area on the optical recording medium and a size of the supplementary spare area; and

(b) formatting the optical recording medium in response to the formatting request.

3. (Three Times Amended) A method of claim 1, wherein said resetting step (a) comprises converting the location information of the supplementary spare area to a [the] predetermined [reset] value[, thereby erasing any previously stored location information].

14. (Twice Amended) A method of formatting a recording medium, the recording medium storing therein location information of a supplementary spare area, the method comprising:

receiving an instruction to format the recording medium;

resetting the location information of the supplementary spare area [stored on the recording medium to a predetermined reset value] in response to the instruction, the location information of the supplementary spare area indicating a location of the supplementary spare area on the recording medium and a size of the supplementary spare area; and

transferring secondary defect information with a new PDL (primary defect list) to format the recording medium according to the instruction.

20. (Amended) A method of claim 14, wherein the resetting step includes the step of:

converting the location information of the supplementary spare area to a [the] predetermined [reset] value[, thereby erasing any previously stored location information].

Claims 24-29 have been added.